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PURPOSE AND NEED

INTRODUCTION

This document is the *Rio Puerco Resource Management Plan Amendment/Environmental Impact Statement for El Malpais National Conservation Area and Chain of Craters Wilderness Study Area*. The purpose of the document (referred to as "the El Malpais Plan" or "the plan") is land use planning for the public lands and resources of the El Malpais National Conservation Area (NCA) and certain adjacent lands (refer to Map 1). As required by Public Law (P.L.) 100-225, the enabling act for the NCA, this plan also amends the *Rio Puerco Resource Management Plan* (RMP--USDI, BLM 1986).

The plan provides a comprehensive framework for managing and allocating resources for the NCA and contiguous lands for the next 20 years. It includes four alternatives and a Draft Environmental Impact Statement (EIS) that fulfill requirements of P.L. 100-225, the Federal Land Policy and Management Act (FLPMA), and the National Environmental Policy Act (NEPA). In accordance with P.L. 100-225, this document also contains analysis and a recommendation on the suitability of the Chain of Craters Wilderness Study Area (WSA) for inclusion into the National Wilderness Preservation System.

Before Congressional designation of the NCA, management of the area was guided by the RMP. This plan amends some of the RMP decisions related to the NCA. As the NCA is a small part of the lands managed by the Albuquerque Field Office (formerly the Rio Puerco Resource Area), the majority of RMP decisions will not be affected by this amendment. Since enactment of P.L. 100-225, the BLM has acquired 13,400 acres in the NCA and 14,000 acres of land contiguous to it. Some of the acquired lands were not addressed in the RMP. As these lands contain resource values complimentary to those of the NCA, they are included in this plan.

This plan also considers recommendations to the Congress that the NCA boundaries be adjusted to remove certain contiguous lands and add others. The lands proposed for removal belong to the Acoma Tribe and total 960 acres. The contiguous lands for addition consist of 26,200 acres of public land in Cibola County that are managed by the Albuquerque

Field Office, and 15,100 acres of public land in Catron and Socorro Counties managed by the Socorro Field Office. Regardless of this plan's recommendations, Congressional action will be needed to change the NCA boundary.

[Note: Except for the proposed recommendation to amend the NCA boundary, no other management decisions in this plan will apply to the Socorro Field Office federal lands. The *Socorro Resource Management Plan* (USDI, BLM 1989c) will continue to guide management of these lands pending Congressional action.]

BACKGROUND

The NCA was established by P.L. 100-225 on December 31, 1987. Congressional designation of the area as an NCA requires the BLM to manage the area's resources with a higher order of protection than that followed on other multiple use lands.

To ensure protection of the NCA's resources, P.L. 100-225 required the agency to prepare a General Management Plan (GMP) for the NCA. Between 1988 and 1991, the BLM developed a GMP and Environmental Assessment (EA) for NCA. The GMP/EA was appealed to the Interior Board of Land Appeals (IBLA) on the grounds that an RMP Amendment and EIS should have been prepared.

In 1994, the IBLA decided in favor of the appellants, directing the BLM to prepare an RMP and EIS for the NCA. This document is being prepared to meet the GMP requirements of P.L. 100-225 and the IBLA decision.

LOCATION OF THE PLANNING AREA

The Planning Area, including the NCA and contiguous lands, lies south of the city of Grants, New Mexico in Cibola County. This area is referred to as "the Planning Area"; the smaller area designated in P.L. 100-225 is referred to as "the NCA." The Planning Area encompasses 248,000 acres of federal and 36,500 acres of private land. It is bordered on the east by the Acoma Indian Reservation, on the south by

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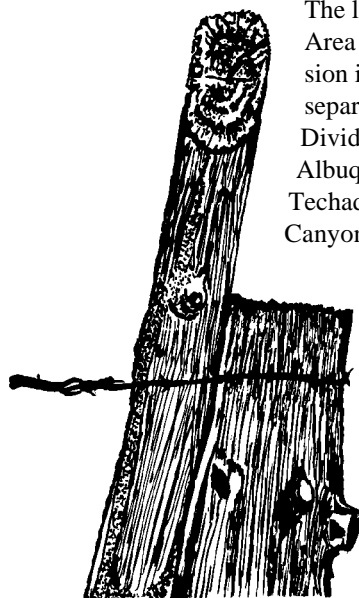
Catron and Socorro Counties, on the west by Ramah Navajo land, and on the north by the Zuni Mountain portion of the Cibola National Forest (refer to Map 2). The northern section of the Planning Area nearly surrounds the El Malpais National Monument, administered by the National Park Service (NPS).

ADMINISTRATIVE UNITS WITHIN & ADJACENT TO THE PLANNING AREA

The NCA is the primary area for which this plan is being prepared. It contains three administrative units with additional special designations, the Cebolla Wilderness, the West Malpais Wilderness and the Chain of Craters Wilderness Study Area (WSA--refer to Map 2). For geographic and descriptive purposes, the remainder of the NCA has been divided into seven other administrative units, the Brazo, Breaks, Cerritos de Jaspe, Cerro Brillante, Continental Divide, Neck, and Spur (refer to Map 3, and to Table 1-1 for acreage).

The Planning Area also includes lands acquired by the BLM since 1987 that are within or adjacent to the NCA, and lands or easements needed to develop the Continental Divide National Scenic Trail (CDNST). Five areas adjoining the NCA are being considered for inclusion into it. The lands outside the NCA but within the Planning Area boundary have been divided into two separate units, the Brazo Non-NCA and the Breaks Non-NCA (refer to Map 3).

The lands outside the Planning Area being considered for inclusion into the NCA consist of three separate units, the Continental Divide-AFO (managed by the Albuquerque Field Office), the Techado Mesa-SFO and the Tank Canyon-SFO (both managed by the Socorro Field Office). Across a sixth unit, the Cerro Brillante-AFO (also managed by the Albuquerque Field Office), the BLM would seek an easement for the CDNST. A description of all sixteen units follows.



[Note: Congressional action would be required before any of these adjoining units could become part of the NCA. If the Congress included them within the NCA, additional BLM planning would be needed (including amendments to the existing RMPs).]

[If Congressional action resulted in lands in Socorro and Catron Counties being added to the NCA, management would be under the existing Socorro RMP pending completion of an RMP amendment. The amendment would specifically address management of the resources and uses in the SFO units, including (among others) cultural resources, rights-of-way, minerals, visual resources, recreation and off-road vehicle travel. Some of these resources and uses are described briefly in Appendix R.]

NCA Units

Cebolla Wilderness

This wilderness is located along east side of New Mexico (NM) 117 from The Narrows to County Road 41 (to Pie Town). The area encompasses approximately 62,000 acres, of which 99 percent is under BLM administration.

Mesas, canyons, buttes, and wide grassy valleys characterize the area. Sandstone forms a cliff face along the east side of the unit at the base of Cebollita Mesa. The sides of the mesa are covered by recent landslide deposits, while the top is capped by lava flows approximately 2.5 million years old. La Ventana Natural Arch, one of the largest in New Mexico, is located approximately 8 miles south of the BLM Ranger Station in this wilderness.

West Malpais Wilderness

This wilderness is located north and east of County Road (CR) 42 and southwest of the El Malpais National Monument. Vehicular access along the west side of the area is dependent on the condition of CR 42, which can become impassable in wet weather. The wilderness encompasses approximately 39,800 acres, of which 99 percent is under BLM administration.

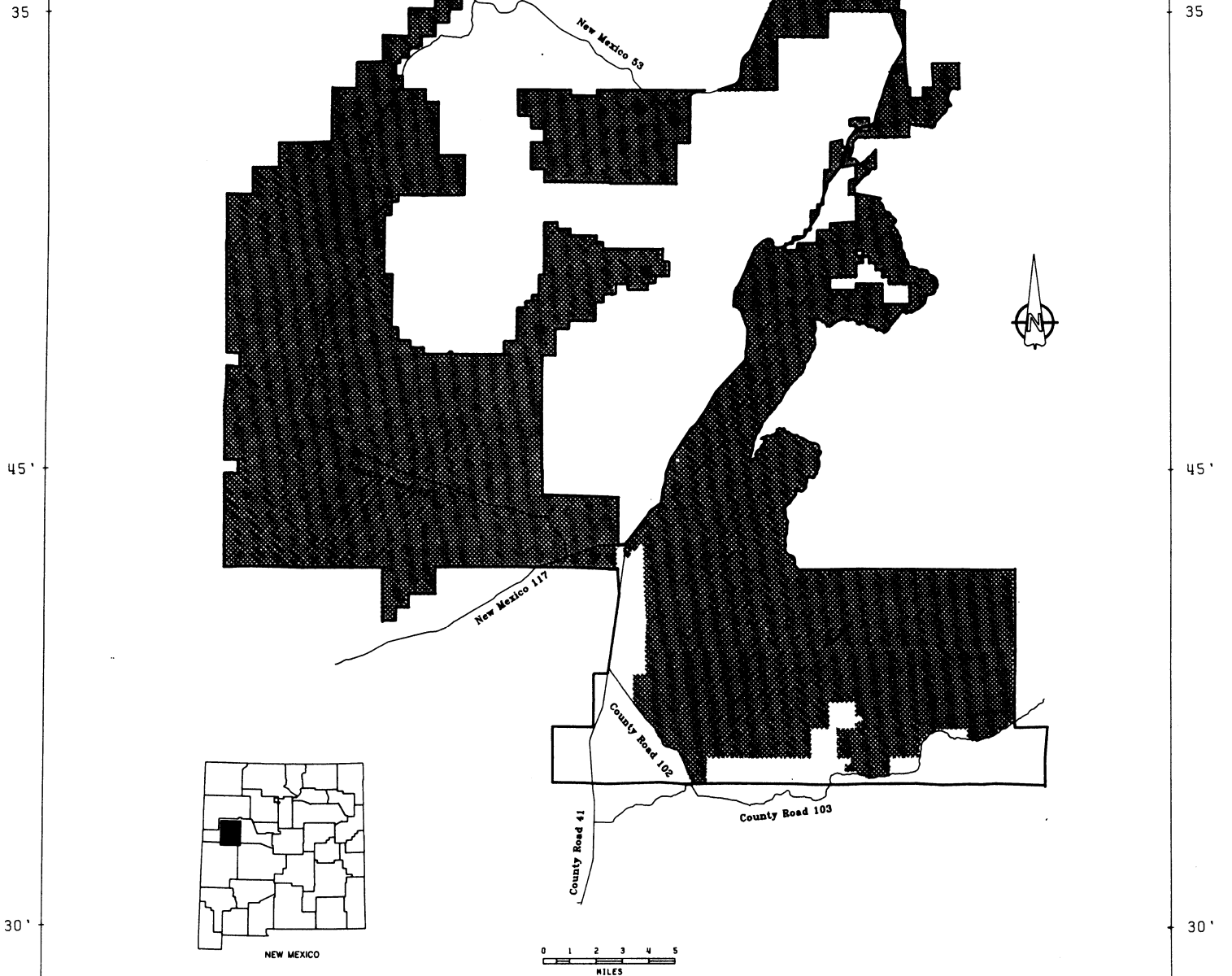
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35 15' 35 1

El Malpais Planning Area

Map 1

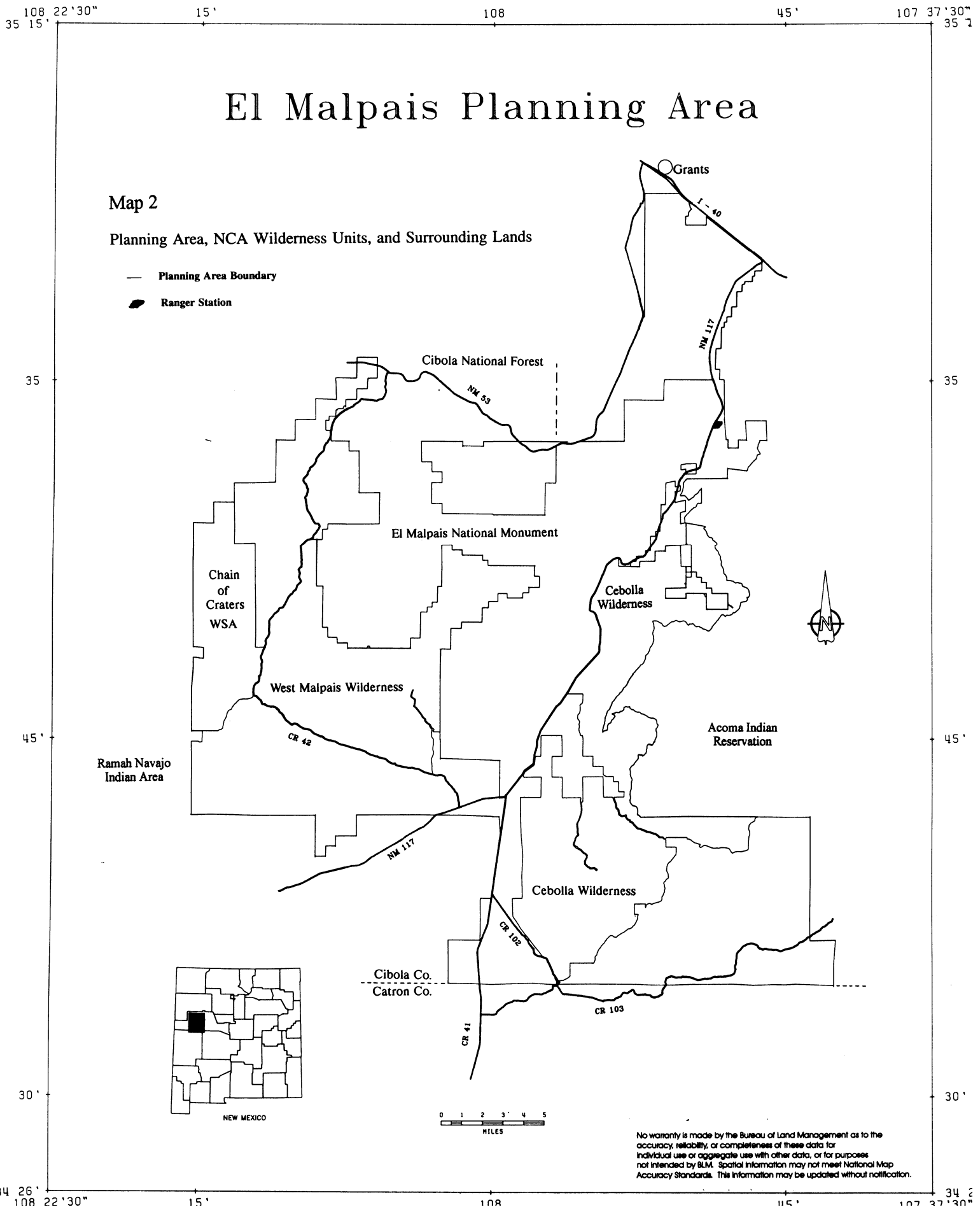
General Location

- Planning Area Boundary
- Ranger Station
- El Malpais National Conservation Area



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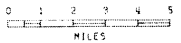
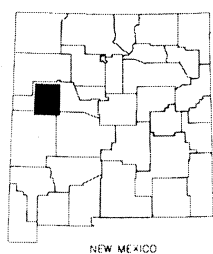
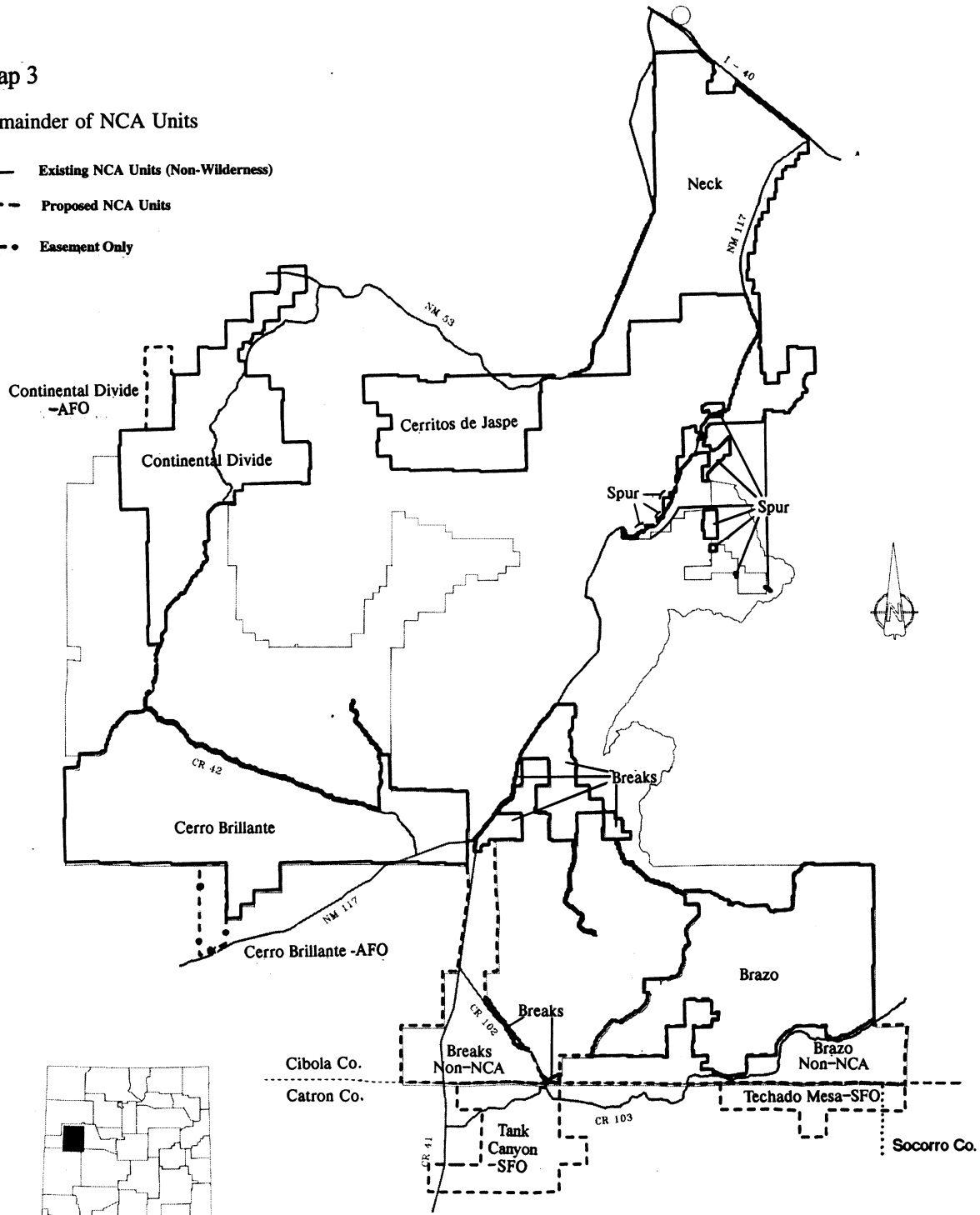
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El Malpais Planning Area

Map 3

Remainder of NCA Units

- Existing NCA Units (Non-Wilderness)
- - - Proposed NCA Units
- . . . Easement Only



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TABLE 1-1

**ACREAGE FOR THE EL MALPAIS NATIONAL CONSERVATION AREA (NCA),
PLANNING AREA, AND AREAS UNDER CONSIDERATION FOR ADDITION TO THE NCA
(rounded to nearest 100 acres)**

Unit	BLM	Private	Indian	Total
<u>Within NCA</u>				
Cebolla Wilderness	61,500	300	200	62,000
West Malpais Wilderness	39,300	500	0	39,800
Chain of Craters Wilderness Study Area	18,300	0	0	18,300
Brazo	28,700	900	0	29,600
Breaks	6,500	0 ^a	0	6,500
Cerritos de Jaspe	9,200	3,500	0	12,700
Cerro Brillante	34,400	1,700	0	36,100
Continental Divide	17,500	6,800	0	24,300
Neck	6,100	20,300	800	27,200
Spur	4,500	300	800	5,600
Subtotal NCA	226,000	34,300(+) ^a	1,800	262,100
<u>Within Planning Area/Outside NCA</u>				
Brazo Non-NCA (Cibola County)	10,400	1,700	0	12,100
Breaks Non-NCA (Cibola County)	11,600	500	0	12,100
Subtotal Non-NCA	22,000	2,200	0	24,200
Total Planning Area	248,000	36,500	1,800	286,300
<u>Outside Planning Area & NCA</u>				
Cerro Brillante-AFO (Cibola County) ^b	0	2,000	0	2,000
Continental Divide-AFO (Cibola County)	2,000	0	0	2,000
Tank Canyon-SFO (Catron County) ^c	9,900	200	0	10,100
Techado Mesa-SFO (Catron, Socorro Counties)	5,000	0 ^d	0	5,000
Subtotal	16,900	2,200(+) ^d	0	19,100
Grand Total	264,900	38,700	1,800	305,400

Notes: ^a The Breaks Unit contains 22 acres of private land.

^b AFO is the Albuquerque Field Office (formerly the Rio Puerco Resource Area of the Albuquerque District). The BLM would seek an easement for the CDNST across this unit, but would not include it within NCA boundaries unless owners were willing to sell or make an exchange.

^c SFO is the Socorro Field Office (formerly the Socorro Resource Area of the Las Cruces District).

^d The Techado Mesa-SFO Unit contains 40 acres of private land.

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Within the wilderness, volcanic landscapes dominate. Lava flows 800,000 years old and portions of younger flows from the National Monument are found in and surrounding the area.

Chain of Craters Wilderness Study Area (WSA)

This unit is located along the western edge of the Planning Area between CR 42 and Ramah Navajo Indian land. It encompasses approximately 18,300 acres, all of which are under BLM administration. The Continental Divide crosses the western portion of the Planning Area in the WSA.

Within the WSA, volcanic landscapes predominate. A series of cinder cones is scattered through this area and to the north, rising above a floor of 800,000-year-old lava flows. The older flows are covered with grass, low shrubs, piñon and juniper trees. The highest point is Cerro Lobo, at an elevation of 8,345 feet.

Brazo Unit

The Brazo Unit is located in the extreme southeastern corner of the Planning Area, east of the Cebolla Wilderness and south of the Acoma Indian Reservation. This unit provides access to the wilderness from the east-southeast, and encompasses approximately 29,600 acres, of which 97 percent is under BLM administration.

Sandstone mesas, canyons, buttes and wide grassy valleys characterize the unit. The area is predominantly piñon-juniper woodlands with scattered sections of ponderosa pine forest. Access is by dirt roads that may be impassable during wet weather.

Breaks Unit

The Breaks Unit is located in the southeastern portion of the Planning Area just east of NM 117, and is surrounded by the Cebolla Wilderness. The unit encompasses approximately 6,500 acres, nearly all of which are under BLM administration (22 acres are private land).

Mesas, canyons, buttes, and wide grassy valleys make up the unit. The dominant vegetation is shrub-grassland with intermingled piñon-juniper woodland.

Cerritos de Jaspe Unit

The Cerritos de Jaspe Unit, located in the north-central portion of the Planning Area, is surrounded by the National Monument (except for about 3 miles along NM 53). Approximately 12,700 acres make up the unit, with about 72 percent under BLM administration.

Volcanic landscapes dominate the interior of this unit, while ancient lava flows and portions of younger flows in the National Monument surround it. This volcanic topography is combined with sandstone and limestone ridges, resulting in a diversity of natural features. The ridges are the south end of the Zuni Mountains; they support a complex of Douglas fir and ponderosa pine woodland found here at elevations lower than would be expected.

Cerro Brillante Unit

The Cerro Brillante Unit extends from the southwestern corner of the Planning Area along the southern boundary and to NM 117. The northern boundary is CR 42, which also forms the southern and western boundary of the West Malpais Wilderness. Approximately 36,100 acres lie within the unit, with 95 percent under BLM administration.

The landscape of this unit is dominated by rolling hills and swales covered with shrub-grasslands and small clumps of piñon-juniper woodlands. Cerro Brillante, a cinder cone reaching an elevation of approximately 8,050 feet, gives the unit its name. La Rendija, a large crack in the old basalt flows, bisects the unit from north to south along the corridor for the CDNST.

Continental Divide Unit

This unit is located in the northwestern portion of the Planning Area, bordered on the east by the National Monument. The unit encompasses approximately 24,300 acres, about 72 percent of which is under BLM administration. A series of aligned, steep-sided volcanic cinder cones and craters passes through this unit and the Chain of Craters WSA to the southwest.

Neck Unit

The Neck Unit is bounded on the north by Interstate 40 (I-40) and along the west by NM 53 and the community of San Rafael. The eastern edge of the unit runs along NM 117, with the National Monument as its southern boundary. The unit encompasses approximately 27,200 acres, with 22 percent under BLM administration.

This unit is a basalt-floored valley between the Zuni Mountains on the west and Las Ventanas Ridge on the east. It is truncated on the north by the Rio San Jose and Horace Mesa (southwest of Mount Taylor). Vegetation is mostly woody shrubs and grasses striving to exist on the older lava flows.

Spur Unit

The Spur Unit is located on the eastern edge of the Planning Area, just east of NM 117 and south of the Neck Unit. The BLM Ranger Station is located within this unit, which encompasses approximately 5,600 acres (with 80 percent under BLM administration).

The unit consists of sandy-bottomed valleys with rocky mesa topography along NM 117. Piñon-juniper woodlands dominate the vegetation.

Units Within the Planning Area but Outside the NCA

Brazo Non-NCA Unit

Located south of the Brazo Unit, this unit contains approximately 12,100 acres, of which 86 percent is under BLM administration. These lands have similar topography and resource values to those of the adjacent Brazo Unit.

Breaks Non-NCA Unit

The Breaks Non-NCA Unit is located just west and south of the Cebolla Wilderness, generally along CR 41. It encompasses approximately 12,100 acres, of which 96 percent is under BLM administration. (Over 70 percent of this total BLM acreage was acquired as part of recent land exchanges.)

Open grasslands characterize the unit. Vegetation consists of grasses and shrubs, including blue grama and fringed sage. Part of the unit is classified as having the "sparse to bare" vegetation type, which is extremely sensitive to climatic variation and surface disturbance.

Units Outside the Planning Area & NCA

Cerro Brillante-AFO Unit (Albuquerque Field Office)

This unit is located on the southern edge of the Cerro Brillante Unit, and is comprised of three sections of land outside the current NCA boundary south to NM 117. Similar to the Cerro Brillante Unit, this unit is dominated by rolling hills of old lava with open shrub-grassland vegetation. Approximately 3 miles of the route selected for the location of the CDNST treadway lie within the unit (on 2,000 acres of privately owned land). No BLM-administered land exists within this unit, and the agency would seek only an easement here unless owners were willing to sell or make an exchange.

Continental Divide-AFO Unit (Albuquerque Field Office)

This unit is located along the northwestern edge of the Continental Divide Unit, bordered on the south and east by the NCA boundary and on the north and west by private lands. It encompasses approximately 2,000 acres, all of which are under BLM administration. The topography of the unit is similar to that of the adjacent Continental Divide Unit.

Tank Canyon-SFO Unit (Socorro Field Office)

This unit adjoins the southwestern edge of the Planning Area and contains approximately 10,100 acres. Most of the unit is contained in a scenic area of rolling topography, with dominant piñon and juniper vegetation.

Techado Mesa-SFO Unit (Socorro Field Office)

The Techado Mesa-SFO Unit adjoins the southeastern edge of the Planning Area, and contains approximately 5,000 acres of public land and 40 acres of

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private land. This area has rolling topography and a high, steep-sided mesa capped by lava flows. Vegetation is dominated by piñon-juniper woodland and ponderosa pine forest with some oak/deciduous understory. Small playa lakes form seasonally on the mesa top.

MANAGEMENT OF THE NCA SINCE ITS ESTABLISHMENT

The El Malpais NCA enabling act, Public Law 100-225, contains specific directives for the BLM (refer to Appendix A for legislative highlights). Since the signing of the act on December 31, 1987, the BLM (along with other agencies and groups) has completed key actions in the NCA that are listed in Appendix B.

THE PLANNING PROCESS

The BLM develops three types of plans, RMPs (and RMP Amendments), Activity Plans and Project Plans. An RMP is a general land use plan as prescribed by FLPMA. An RMP Amendment is a modification of a portion of an original RMP. An RMP or RMP Amendment is always accompanied by an EA or EIS.

An Activity Plan is a more detailed and specific plan for managing a single resource program or special management unit. Examples include a cultural resource management plan, a wildlife habitat management plan or a wilderness management plan. An Activity Plan is usually accompanied by an EA, or occasionally an EIS (for a more complex situation).

A Project Plan is a very detailed, site-specific plan for developing a particular project, such as an interpretive kiosk, a wildlife guzzler or a campground. Project plans are usually accompanied by an EA.

In this document, both activity-level planning and RMP Amendment decisions are presented. Preparation of this document follows the BLM's nine-step process for preparing RMPs, which is summarized in Figure 1. (Publication of this document completes Step 7* in this process.) The process focuses on planning issues, which are significant resource problems, concerns or opportunities that strongly affect management direction.

The planning issues are identified after the completion of public scoping. The different ways of solving the issue questions provide the basis for the alternatives. This document presents the Planning Area alternatives (Chapter 2), including the BLM's Preferred Alternative. Background resource information (Chapter 3) and an analysis of the impacts for each alternative (Chapter 4) are also presented.

After considering public comments on this document, the BLM will select the Proposed Plan. The plan can be any one alternative, or mixtures of the actions and prescriptions from the various alternatives. The agency will then release for public review the Proposed Plan and Final EIS, including responses to public comments received on the draft document. The Proposed Plan and Final EIS will also specify activity-level planning decisions, and decisions that amend the RMP.

FIGURE 1

RESOURCE MANAGEMENT PLAN/ AMENDMENT PROCESS

Issue Identification

Development of Planning Criteria

Collection of Inventory Data & Information

Management Situation Analysis

Formulation of Alternatives

Estimation of Effects of Alternatives

***Selection of Preferred Alternative (Draft RMP Amendment/EIS)**

Selection of Resource Management Plan (Proposed RMP Amendment/Final EIS) (Approved Plan Amendment/Record of Decision)

Monitoring & Evaluation

When the BLM releases the Proposed Plan/Final EIS, affected parties who participate in the planning effort may protest the decisions that amend the RMP. (To protest an RMP Amendment decision, the pro-

tester must have made comments during the public review period provided for the Draft Plan and EIS.) After any protests are resolved, the BLM will prepare an Approved Plan and Record of Decision (ROD). Once the ROD is published, parties adversely affected by activity-level planning decisions may appeal to the IBLA (in accordance with 43 CFR 4.400-.704).

[Note: P.L. 100-225 requires that the plan for the NCA must include the following: implementation plans for a continuing program of interpretation and public education, proposals for public facilities, a management plan for natural and cultural resources, and a management plan for wildlife. The BLM also develops management plans for designated wildernesses. This El Malpais Plan contains these elements; the BLM's management alternatives include prescriptions that, taken together, compose these plans and proposals. No other separate, individual documents containing these elements will be published.]

PLAN AMENDMENTS

If approved, several proposals contained in this document would amend the *Rio Puerco Resource Management Plan* (RMP--USDI, BLM 1986). The RMP amendments would apply to four issues: 1--Recreation (Visual Resource Management), 3--Access and Transportation, 5--Wilderness Suitability and 10--Boundary and Land Ownership Adjustments.

Proposals under Alternatives B, C and D would amend the RMP by adjusting some previously assigned Visual Resource Management (VRM) classes, and by assigning classes to acquired lands outside the NCA that were not addressed in the RMP. Table 2-8 shows a comparison of the acreage in each VRM class by alternative, and the text of Chapter 2 includes a discussion of these proposals. (The VRM classes influence where recreational or other facilities would be located.)

Also under these alternatives, motor vehicle use designations on varying amounts of public land in the Planning Area would be changed from "open" to "limited" (to designated routes and trails--refer to Table 2-10 and the accompanying text in Chapter 2). This change would also apply to acquired lands not addressed in the RMP. Varying numbers of miles of

access routes would be designated as "open," "closed" or "authorized" (for use by certain users only--refer to Table 2-11). All changes in motor vehicle use or route designations would amend the RMP.

For Issue 5, Wilderness Suitability, under the different alternatives the BLM would recommend varying amounts of acreage contiguous to the Cebolla Wilderness for designation. Under Alternative A, the 10,380 acres considered (refer to Map 25) would not be recommended, so the RMP decision would not be amended. The BLM would amend the RMP under Alternative B by recommending the designation of an additional 3,640 contiguous acres as wilderness (refer to Map 26). Under Alternative C, the agency would recommend the designation of an additional 9,180 contiguous acres (refer to Map 27), as well as the 18,300-acre Chain of Craters WSA. Under Alternative D (the Preferred Alternative), the agency would amend the RMP by recommending the designation of 3,930 contiguous acres as part of the Cebolla Wilderness (refer to Map 28).

Proposals under Alternatives B, C and D would amend the RMP for Issue 10, Boundary and Land Ownership Adjustments, by recommending various NCA boundary changes. These changes are described in more detail in Chapter 2 under the discussion of this issue for each alternative.

ENVIRONMENTAL CONCERNS NOT WARRANTING DETAILED ANALYSIS

NEPA regulations require that the following environmental concerns be considered in this document. They have been reviewed and for the reasons stated were determined not to warrant detailed analysis. These elements will also be reviewed during project-level environmental analysis to implement this plan.

1. Wild Horses and Burros--None of these animals are known to exist in the Planning Area.
2. Air Quality--Recreation, other activities and natural occurrences may cause dust, while smoke from fires may result in air quality standards being exceeded for short periods of time. Implementation of management prescriptions to meet vegetation objectives (refer to Chapter 2) should

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reduce dust and minimize fire-created smoke. No actions proposed in this document are expected to cause substantial adverse effects to air quality. These effects will be assessed in EAs prepared to implement this plan.

3. **Hazardous Materials**--No sites within the Planning Area have been identified to contain hazardous substances. If such sites are identified in the future, all surface and/or subsurface activities will be suspended until the BLM obtains direction from the appropriate federal and/or state regulatory agency.
4. **Prime and Unique Farmlands**--During the homesteading era (1930s-1940s) numerous small, family dry-farming operations were scattered throughout the Planning Area. These small farms disappeared by the end of the 1940s, and today no farming is occurring there. Because of the lack of water, the large lava flows and shallow rocky soils, no prime and unique farmlands exist within the Planning Area.
5. **Floodplains**--In the Planning Area, runoff results from high-intensity summer rainstorms and occasional snowmelt. As the area is a closed basin with no perennial streams, no floodplains exist.
6. **Wild and Scenic Rivers**--In investigating public land within the Planning Area, the BLM has found no rivers or segments that would meet eligibility criteria (as defined by the Wild and Scenic Rivers Act) for inclusion as components of the National Wild and Scenic Rivers System.

PLANNING ISSUES & CRITERIA FOR THE EL MALPAIS PLAN

As shown in Figure 1, issue identification is the first step in the BLM's planning process. For a given planning area, the **issues** are **significant problems, concerns or opportunities that strongly affect management direction**. They can be identified by the general public, American Indian tribes, other federal agencies, state and local governments, and BLM staff. After all tentative issues have been identified, the Field Office Manager selects the topics to be addressed as issues for the RMP Amendment/EIS. These issues are the center or focal point of the plan.

The characteristics of **planning issues** include the following:

- They represent significant decisions that must be made.
- They are controversial (problems or opportunities) and demand management attention.
- They raise choices to which alternative management responses can be made.
- They can be dealt with under BLM authority and jurisdiction.
- They lead to an action (i.e., protection, designation, or special management).
- They do not pertain to a subject already resolved in a previous plan or environmental analysis unless new information shows that the previous decision is no longer accurate.
- They apply to most or all of the Planning Area. They are not so site-specific as to be more appropriate for an activity-level plan.

Planning criteria are the factors the BLM evaluates to develop answers to (decisions about) the issues. These criteria direct the preparation of the RMP Amendment/EIS, establishing limits on the analysis needed to resolve the issues. They determine how the planning team approaches the development of alternatives and ultimately, selection of a Preferred Alternative.

Planning criteria consist of discretionary (optional) and non-discretionary (required) standards. Examples of non-discretionary criteria are various applicable laws (such as FLPMA and the Endangered Species Act), regulations, policies and Executive Orders. Discretionary criteria are reflected in the next section.

The following issues and criteria are based on input from the public and the planning team during the scoping process. These issues represent resource or program areas for which the BLM anticipates changes in management direction within El Malpais as a result of the planning process. The issues are not listed in order of priority.

[Note: Some issues raised during scoping meetings are not addressed because they are outside the BLM's jurisdiction, are covered by previous plans, or can be better handled through day-to-day, standard operating procedures. Examples of issues outside the BLM's control include grazing fees, water rights or other matters determined by law or regulation, or those controlled by other agencies. Interpretation and public education were originally listed as a separate issue. However, the BLM has determined that these concerns can be adequately resolved administratively. These management tools are discussed with the other issues they support.]

Issue 1--Recreation

Designation of the NCA by the Congress gave formal recognition to the area's public recreational values. The area is relatively undeveloped but attracts visitors who want to participate in a variety of recreational activities and settings. The recreational demand in the Planning Area is expected to increase because of population growth within a day's driving time of the area, its accessibility from three highways, and the increased publicity the area is receiving.

Issue Questions

- What range of recreational opportunities (e.g., off-road vehicle touring, biking, horseback riding, backpacking, hiking) should be provided to meet the wide variety of public demands?
- What BLM actions are needed to provide these recreational opportunities?

Planning Criteria

The BLM has considered the following factors in developing answers to the above questions.

- * Existing recreational use and facilities;
- * Public demand for recreational activities, settings, and opportunities;
- * Compatibility with other land and resources uses;
- * Public health and safety;
- * Public interests and concerns; and

- * Coordination with the NPS.

Issue 2--Facility Development

The Planning Area is characterized as a predominantly natural environment with few facilities for the comfort and convenience of visitors. Current facilities include a Ranger Station with interpretive exhibits on the east side; a parking area, trail and restrooms at La Ventana Natural Arch; and a picnic/camping area at the south end of The Narrows. Examples of facilities that could be developed are trailheads, interpretive signing, kiosks, parking areas, toilets, water sources or visitor centers.

Issue Questions

- What level of facility development is appropriate?
- Where should the BLM provide facilities?

Planning Criteria

The BLM has examined the following factors in answering these issue questions.

- * Existing facilities;
- * Resource protection;
- * Visitor health and safety;
- * Site location and design;
- * Public interests and concerns; and
- * Coordination with the NPS.

Issue 3--Access & Transportation (Motorized & Non-Motorized)

Through the RMP, the BLM limited vehicle use in the area to existing roads and trails. The exception is in the two wildernesses (refer to Issue 4), where vehicle use and mechanized travel are prohibited. County Roads 41, 42 and 103, and State Highways 53 and 117 provide access to the Planning Area. Numerous routes exist outside the wildernesses; from these, people use their cars, off-highway vehicles, bicycles, horses and other means to gain access into the Planning Area. The BLM has inventoried these routes.

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Also, a route through the Planning Area has been selected for the Continental Divide National Scenic Trail. Access to the route may need to be acquired.

Issue Questions

- What roads and trails should the BLM provide for access to or across the Planning Area's public lands?
- Which roads and trails should be designated as open, limited or closed to use?
- Are new easement acquisitions not identified in the BLM's NCA *Land Protection Plan* (1989) needed to ensure public access?

Planning Criteria

The BLM has considered the following information in answering these issue questions.

- * Existing roads and trails;
- * Compatibility with other land and resource uses; and
- * Public interests and concerns, including those of local American Indian groups.

Issue 4--Wilderness Management

Two designated wildernesses lie within the Planning Area, the West Malpais (39,800 acres) and the Cebolla (62,000 acres). P.L. 100-225 allows for the continuation of livestock grazing, hunting and trapping in these areas. This law also recognizes the need for access by local American Indians for traditional cultural and religious practices, and provides for the scientific use of archeological resources in the Cebolla Wilderness.

Issue Questions

- What actions are needed to protect and preserve the natural features of each wilderness, while offering visitors an outstanding opportunity for solitude or a primitive and unconfined type of recreation?

- How can the BLM provide access for traditional cultural and religious practices by local American Indians and still be consistent with the Wilderness Act?
- What forms of scientific use of archeological resources can or should be authorized in the Cebolla Wilderness? What permit conditions are needed?

Planning Criteria

The BLM has considered the following factors in answering these issue questions.

- * Management proposals that benefit the wilderness resource;
- * Public interests and concerns; and
- * Maintenance requirements for range improvements.

Issue 5--Wilderness Suitability

Before passage of P.L. 100-225, the BLM had designated El Malpais as a Special Management Area. In addition, portions of El Malpais had been designated as an Outstanding Natural Area, a Natural Environmental Area and a National Natural Landmark. Upon passage of the law, these areas became the NCA and the National Monument.

By establishing the NCA, the Congress recognized the outstanding historic, scenic, natural and cultural resources of the area. P.L. 100-225 directs the BLM to conduct a study of the Chain of Craters area and submit a recommendation as to its suitability for inclusion in the National Wilderness Preservation System (NWPS).

Since the NCA was designated, the BLM has acquired some lands contiguous to the Cebolla Wilderness. These newly acquired lands are also being evaluated for their wilderness suitability.

Issue Questions

- Is the Chain of Craters WSA suitable for recommendation for inclusion in the NWPS?

- Do the recently acquired lands within the Planning Area have wilderness values suitable for inclusion in the NWPS?

Planning Criteria

The BLM has examined the following factors in answering these issue questions.

- * Mandatory wilderness values of size, naturalness, and an outstanding opportunity either for solitude or for primitive and unconfined recreation;
- * Special features, such as landforms or geological expressions;
- * Proximity to existing wilderness;
- * Contribution to the diversity in the NWPS;
- * Ramah Navajo Indian concerns; and
- * Manageability of the area as wilderness.

Issue 6--American Indian Uses & Traditional Cultural Practices

Several American Indian groups use the Planning Area for traditional religious and cultural practices. Acoma Pueblo and the Ramah Navajos have taken a strong interest in management of the area; other tribes such as the Zuni, Laguna, Alamo Navajo, and Cañoncito Navajo may also have concerns. Principal issues include access to sacred places and privacy for religious practices, as well as continued access to areas used for hunting, piñon picking, and gathering of other traditional plants and minerals.

Issue Questions

- How can the BLM facilitate traditional cultural and religious practices within the Planning Area?
- What actions can the BLM take to minimize conflict between traditional practices and other uses?

Planning Criteria

To answer these questions, the BLM has considered the following information.

- * Traditional cultural and religious practices, uses and sensitive areas, including scheduling and participants;
- * NCA legislative requirements; and
- * Formal and informal means of communicating and coordinating with local American Indian groups and individuals.

Issue 7--Cultural Resources

The Planning Area is noted for its cultural resources. Archeological sites in this area span the past 12,000 years and are important for the scientific information they contain. At the same time, many of these same sites figure prominently in the history of several local American Indian tribes, and are very important in traditional cultural practices and belief. Other more recent sites provide links to the Hispanic and Anglo history of this area. The BLM manages these resources for their information potential, for their public values, or for conservation.

Issue Questions

- What management objectives should the BLM establish for cultural resources in the Planning Area?
- What actions should the BLM take to achieve these objectives?

Planning Criteria

To develop answers for these issue questions, the BLM has considered the following information.

- * The relative importance and sensitivity of known and anticipated cultural resources;
- * Their geographic distribution and density;
- * Current and potential threats to these resources;
- * Public interests and concerns, including those of local American Indian groups; and
- * The legislative requirements and history of P.L. 100-225.

CHAPTER 1

Issue 8--Wildlife Habitat

Public lands in the Planning Area provide habitat for a variety of wildlife species. Special management attention is needed to restore, maintain or enhance priority species and their habitats. If these are not properly managed, other uses of the public land can impact wildlife habitat. Integrating habitat management with other resource programs requires careful planning to minimize impacts to priority species and their habitats, while still providing for other uses of the public land.

Issue Questions

- What wildlife species and their habitats should receive management priority?
- What maintenance, improvement, and expansion objectives and actions (including vegetative manipulation) should the BLM identify for these species and habitats?

Planning Criteria

To help answer these questions, the BLM has considered the following factors.

- * Input from federal and state wildlife agencies and the scientific community;
- * Species and habitat of high public and scientific interest;
- * Species habitat requirements;
- * Vegetative communities and habitat condition;
- * Conflicts between exotic and native species; and
- * Maintenance and enhancement of biological diversity.

Issue 9--Vegetation

Vegetation is the common element on which all users of the landscape depend. It provides food and cover for wildlife and domestic animals, and scenic enjoyment for people. It catches rainfall and slows overland flows, reducing soil movement and increasing the amount of water absorbed by the soil. Vegeta-

tion thus affects the quantity and quality of water produced from watersheds, as well as the visual quality of an area's scenery.

Issue Questions

- What are the objectives for the vegetative communities the BLM will be managing to attain?
- What measures are needed to attain these objectives?

Planning Criteria

To help answer these questions, the BLM has considered the following factors.

- * Protection and enhancement of watershed conditions;
- * Unique or fragile soils and vegetation, including threatened and endangered plant species;
- * Areas that require increased vegetative cover to reduce soil erosion, increase forage production, and improve wildlife habitat;
- * Vegetative treatments or manipulation methods, including prescribed fire; and
- * Use of fuelwood harvest and other forestry practices.

Issue 10--Boundary & Land Ownership Adjustments

As the result of recent changes in land ownership and public participation in the planning process, several minor adjustments in the NCA boundaries may be desirable. Also, two relatively small blocks of contiguous public land managed by the Socorro Field Office to the south of the NCA contain resources that would contribute to the NCA. These circumstances raise the question of whether the BLM should recommend modification of the NCA boundaries. Such a modification would require that the Congress pass new legislation. In addition, several other situations exist in which acquisition of lands or interests in lands beyond those identified in the *NCA Land Protection Plan* may be desirable.

PURPOSE AND NEED

Issue Questions

- Should the BLM recommend to the Congress that the NCA boundaries be modified, and if so, in which areas?
 - Are there lands or interests in lands the BLM should acquire through exchange, purchase or donation to further the aims of P.L. 100-225?
- * Resource values that exist on lands within and adjacent to the NCA;
 - * Concerns of local communities, governments, and private landowners; and
 - * The land ownership pattern.

Planning Criteria

To help answer the above questions for this issue, the BLM has considered the following information.

